

SIDAC

Supportability Investment Decision Analysis Center

Contract No. F33657-92-D-2055/0087
CDRL A007, Data Item DI-A-3024A
Report No. SID/MR-96/0095

(Unclassified)

PRESENTATION MATERIAL

for

Army Logistics Assessment Program

Prepared for

HQ USA/DALO-RMI
500 Army Pentagon
Washington, DC 20310-0500

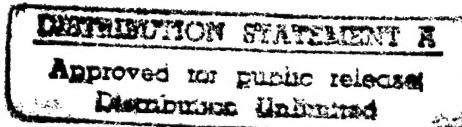
21 June 1996

Prepared by

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13. ABSTRACT (Maximum 200 words) The proof-of-concept model for ALAP demonstrates the feasibility of equating Army measures of OPTEMPO, maintenance rates, and funding levels to sustainment capability. Synergy's ALAP shows that we can link weapon system readiness to sustainability given current and future programmed budget positions to create a viable POM and PPBES decision-support tool. This model also supports the hypothesized outcome of current funding levels affecting future capabilities to successfully prosecute combat missions and contingency operations.						
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Contract No. F33657-92-D-2055
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SECTION 1
INTRODUCTION

The attached presentation materials contain the slide presentations of project reviews conducted for the development of the Army Logistics Assessment Program (ALAP).

APPENDIX A
PEACETIME AND WARTIME MODELING

SYNERGY

PEACETIME AND WARTIME MODELING

**Jim Lutz
Ray Reed
Sean Trench
Mike Austin**

JUNE 95

REQUIREMENT

**THE ARMY NEEDS THE ABILITY TO PERFORM
PEACETIME AND WARTIME CAPABILITY ASSESSMENTS
BASED ON RESOURCE FUNDING FOR
CURRENT AND IN THE FUTURE (POM YEARS)**

BACKGROUND

**ARMY Develops Peacetime & Wartime Requirements (Class IX)
Funding Applied During Budgetary Process**

Peacetime:

**Funding Has Been Good But The Good Times May Be Short Lived
DS/DS Inventories Plus Drawdown Have Reduced Anxieties
However, The Army Needs A Predictive Assessment Tool**

SEAME/SPA Provide Capability to Assess Current + One Year

**Gen (R) Thurman, On Meyer Readiness Task Force
Impressed With USAF Predictive Models (FAMMAS & WINLAM)**

**Successful FAMMAS Prototype Developed
Provides Capability To Assess MC (NMCM + NMCS)
Beginning Production Version (ECD: Sep 95)**

A SEAME/SPA Plus FAMMAS Provides Capability to Assess Current + POM Years

Synergy

BACKGROUND cont.

Wartime:

**Funding Has Not Been Adequate And The Assessment
Capability Limited
OSRAP Is A Good Assessment Tool But Limited To Current + One Year**

**If The Balloon Goes Up Today, WRM Will Be Sourced From Peacetime Assets
Currently, There Are Enough Assets To Meet The Most
Stringent Tasking**

However, Will There Be Enough Two or Three Years From Today

**If The Current Philosophy Continues, "Do More With Less"
And You Lack The Ability To Assess The Impact Of Funding Shortfalls
Then OSD/Congress Will Continue To Not Fund WRM
Until The Army Develops A Capability To Show Impact**

**The DOD Budget Is Usually A Zero Sum Game
Consequently, The Air Force Wins And Army Loses
Because Air Force Can Demonstrate Impact (WINLAM)**

The Army Needs The Capability To Assess Current + POM Years Synergy

BACKGROUND cont.

OSRAP Is A Good Assessment Tool:

**Determines Total (Class IX) Wartime Requirement (Current + POM)
Assess Capability Of Current Stocks + Projected Buys (FY95/96)**

However, Can Not Assess POM Requirement (FY97-02)

**No Procedure To Predict An Asset Position Beyond Current Buys
No Ability To Assess Impact To Funding Shortfalls**

Need To Expand OSRAP To Assess POM Funding Impacts

PROPOSED SOLUTION

Peacetime Capability Assessment Tool:

**Synergy Develop An Army FAMMAS (Predictive Assessment Tool)
AMSAA Modifying OSRAP To Assess Current Asset Position
AMSAA/Synergy Integrate Army FAMMAS Into OSRAP**

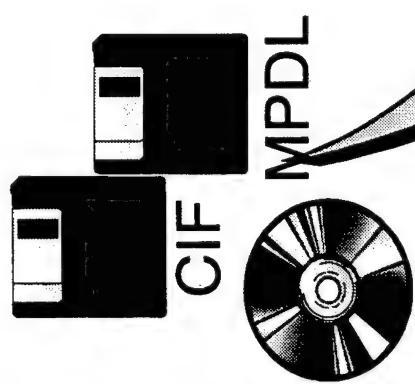
Wartime Capability Assessment Tool:

**Synergy Develop A Wartime Predictive Assessment Capability
AMSAA/Synergy Integrate This Capability Into OSRAP**

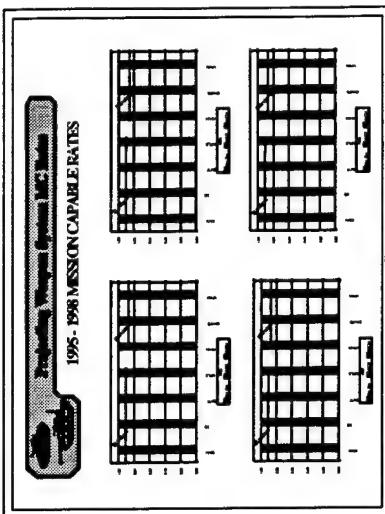
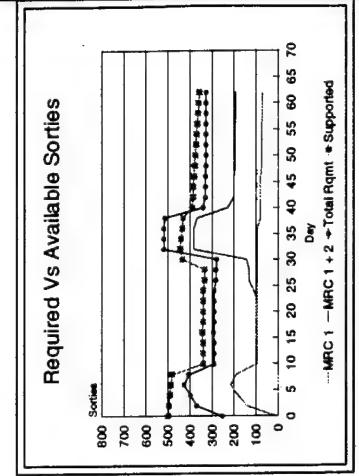
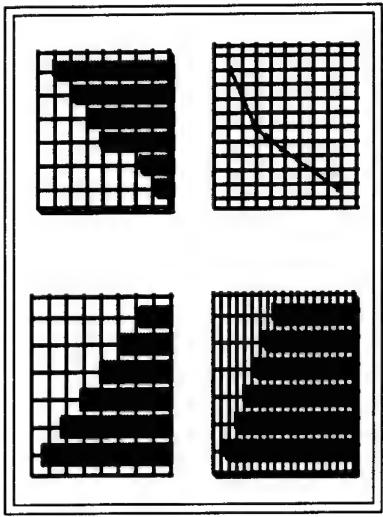
Enables OSRAPS Ability To Assess MC (NMCM + NMCS) For Current + POM

OSRAP ARCHITECTURE

OSRAP DATA SOURCE

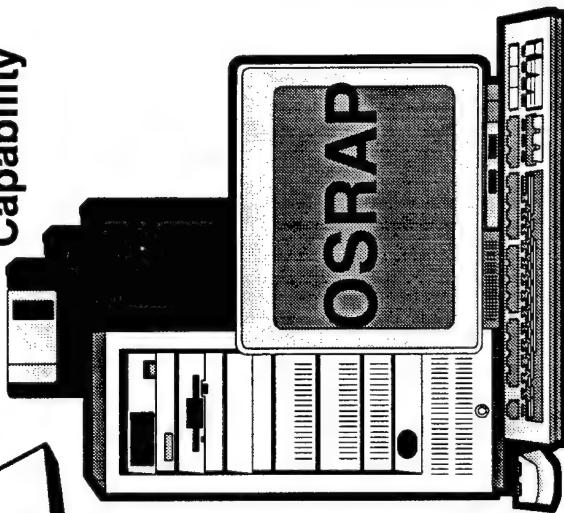


GRAPHIC OUTPUTS



SYNERGY's
Wartime Predictive
Capability

AMDF



A - 7

A - 7

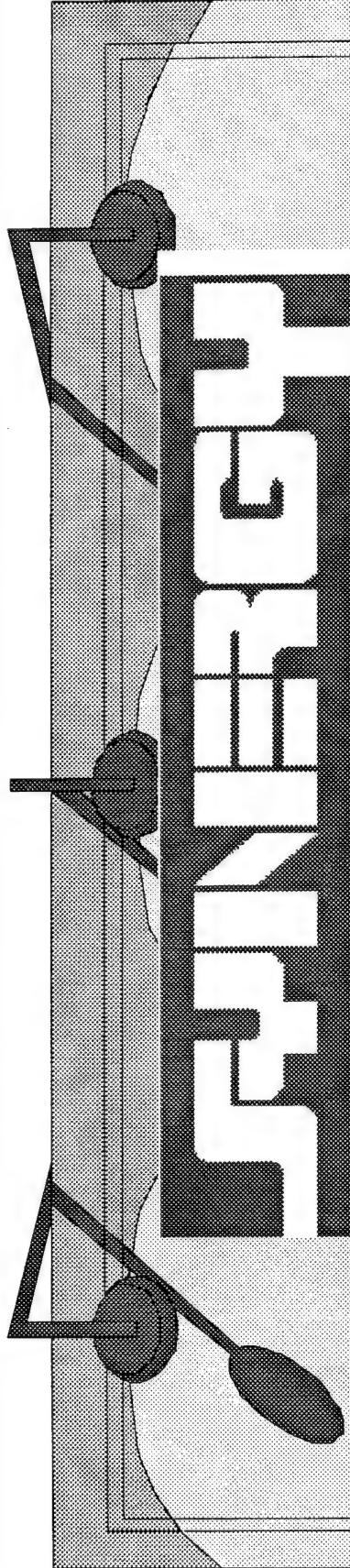
Synergy

FUTURE ENHANCEMENTS

Make OSRAP An Even Better Tool:

- Synergy Asked To Develop Methodology To Assess SE/Mods/Depot
- Synergy/AMSA Desires To Incorporate Other Classes Of Supply In OSRAP

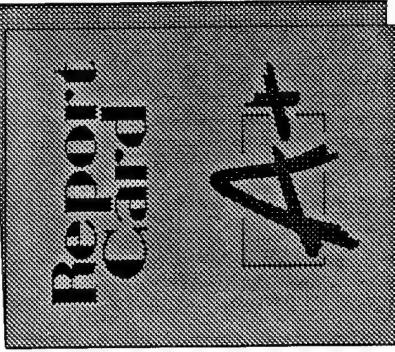
APPENDIX B
ARMY LOGISTICS ASSESSMENT PROGRAM UPDATE



Army
Logistic Assessment
Program Update

29 August 1995

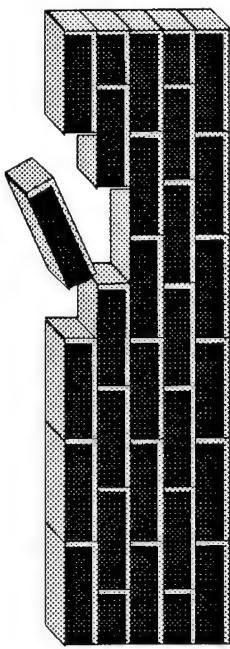
TECHNICAL



- To provide an Update on the Current Status of the ALAP
- To Obtain a Consensus on the Direction of Effort for Work Under the ALAP Contract

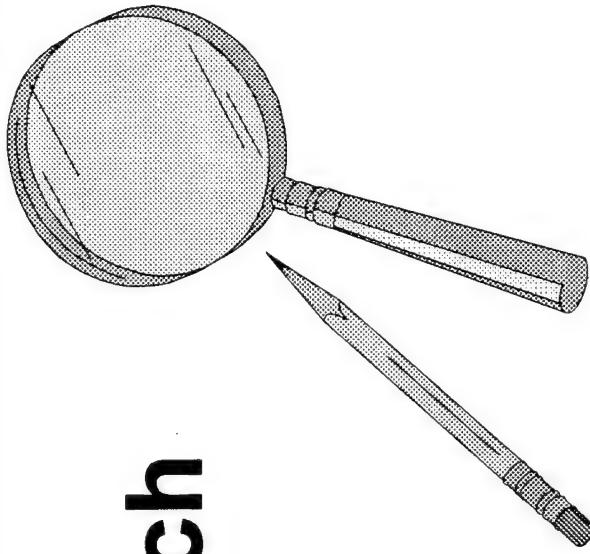
FINESST

Current Work



- Collect Wartime Data
- Address Sustainability/Contingency Issues and Tradeoff Analysis Among the 16 SORTS Weapon Systems
- Investigate Development of Wartime Version of FAMMAS

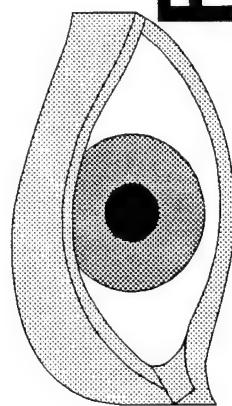
Research



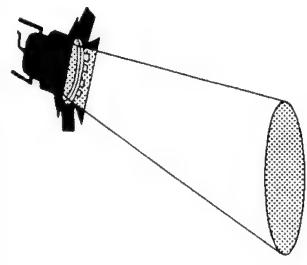
OSRAP

B - 4

- Optimum Stockage Requirements Analysis Program
- Similar Input Requirements - Both Predict Weapon System Operational Availability
- OSRAP Fulfils AMC Sustainment Analysis Requirements

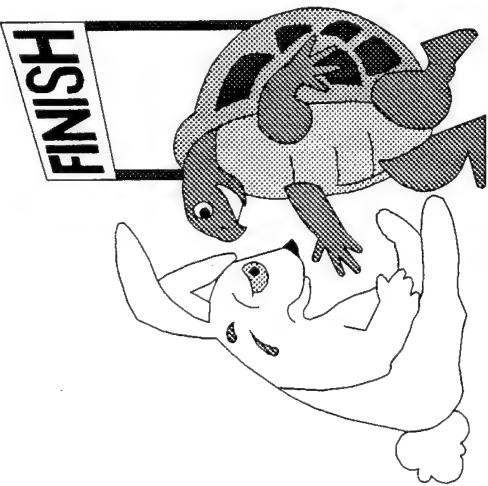


Refocus ALAP Effort Towards PDM Modeling



- Research
- Issues
 - Trade-off Capabilities
 - O& S Cost
- Architecture Development
- Proof of Concept Model

Summary



- Synergy on Contract for work
- Original work planned no longer desired
- Alternative Projects identified and requested
- Synergy ready to refocus work effort
- Current Contract allows refocusing effort

FINISH

Decision

- Work on PDM Modeling
- Continue Work as currently written
- Work with Key Players to ID other areas of interest



APPENDIX C

PROPOSAL FOR PROGRAMMED DEPOT MAINTENANCE MODELING

Background

- Synergy Proposed PDM Modeling for JDmag
- PDM Modeling for Army suggested
- FAMMAS Statement of Work Modified to include
 - PDM Factor in Weapon System Readiness
 - Modified FAMMAS account for average number of systems in depot
 - Missed Opportunity
- PDM modeling should be consistent with JDmag proposal



Approach to JD MAG Modeling Support of PDM

- Multi - Phase Effort
- Critically review completed phase to analyze justification for continuing

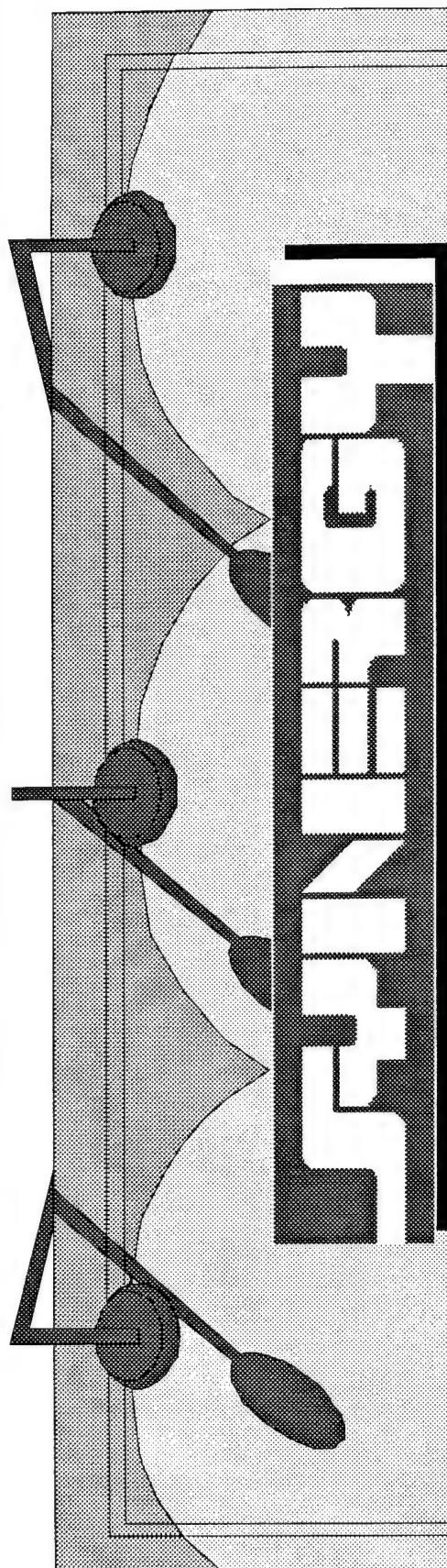


Road Map for Army PDM Modeling

- Identify & Understand the Problem - Conduct Research and Analysis to uncover significant statistical indicators
- Relate PDM Budgets to Weapon System Readiness -
- Develop Proof of Concept Model



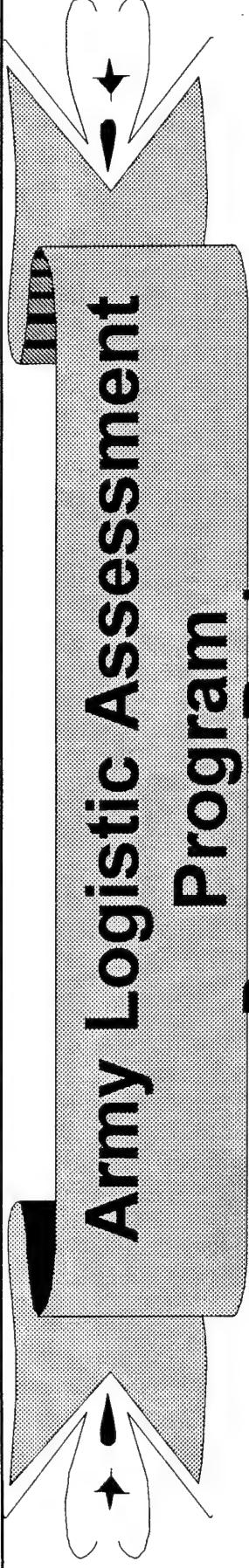
APPENDIX D
ARMY LOGISTICS ASSESSMENT PROGRAM UPDATE



Army
Logistic Assessment
Program Update

5 March 1995

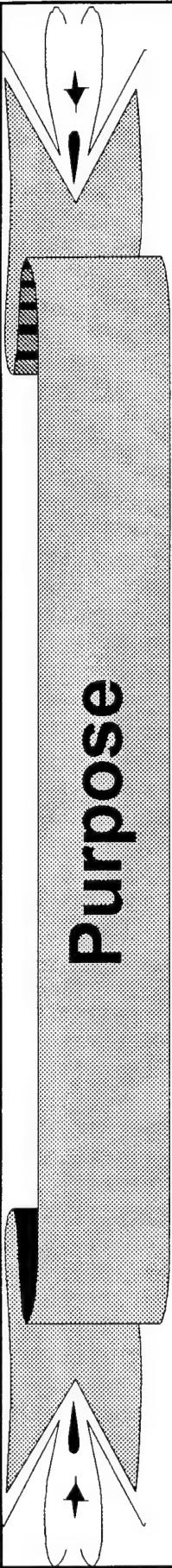
LOGISTICS



Army Logistic Assessment Program Progress Review

Agenda

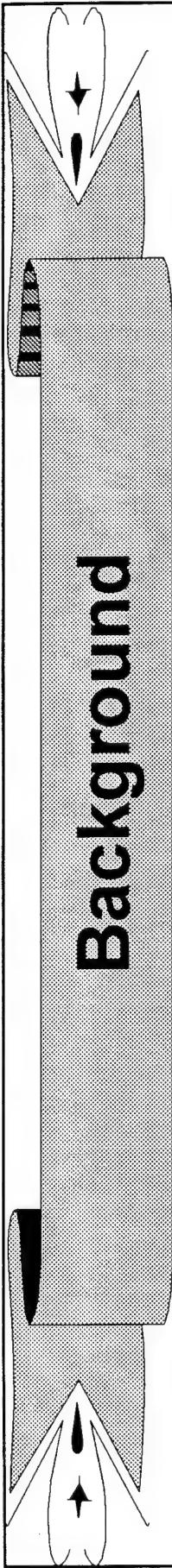
- Purpose
- Background
- Statement of Work
- The ALAP Contract Description
- Chronology of Events
- Contract Objective
- Synergy's Approach to Contract Completion
- Status
- Architecture
- Data Source
- Summary



Purpose

- To Present an Historical Overview of Synergy's Army Logistic Assessment Program (ALAP) and efforts to complete the Project
- To Provide an In-Progress Update as of 5 March 1996
- To Preview the Projects Completion





Background

FALL 1993:

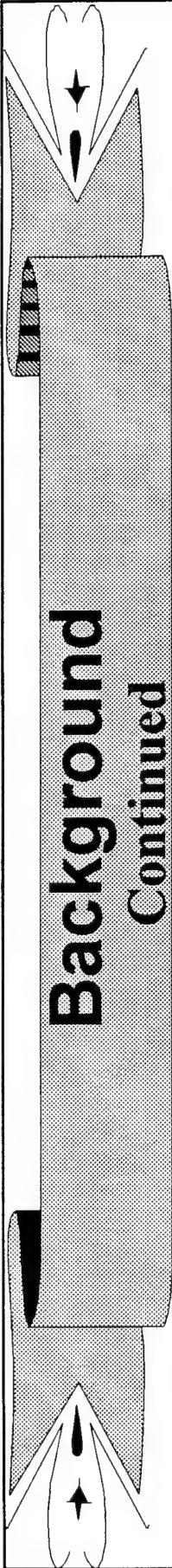
- GEN(R) Thurman, on Meyer Readiness Task Force,
Impressed with USAF FAMMAS

- FAMMAS = Funding/Availability Multi-Method
Allocator for Spares

DEC 1993:

- DCSLOG GEN. Salomon and DUSD (LOG) Mr. Klugh
direct test on AH-64 Apache
- Results were promising





Background

Continued

JAN 9, 1994:

- Dr. Perry Memo added Momentum

FEB-MAR 1994:

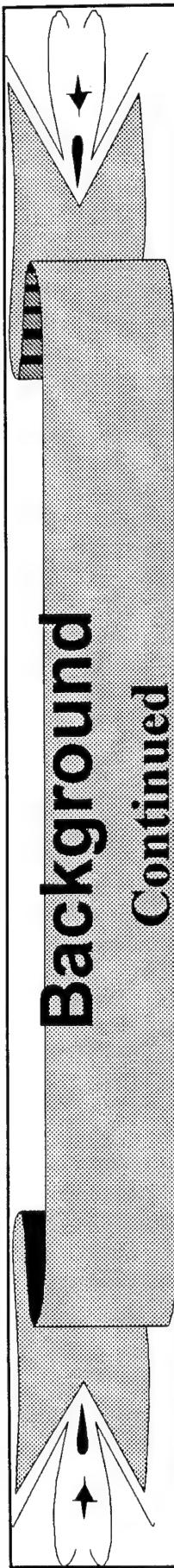
- GEN Salomon directed testing on additional 3 Helicopter systems, Results Acceptable

APR 1994:

- DCSLOG GEN. Wilson directed test on M1A1 & Bradley Fighting Vehicle

- FAMMAS successfully fitted to ground systems





Background

Continued

MAY 1994:

- GEN Wilson directed test on all 16 Major SORTS systems

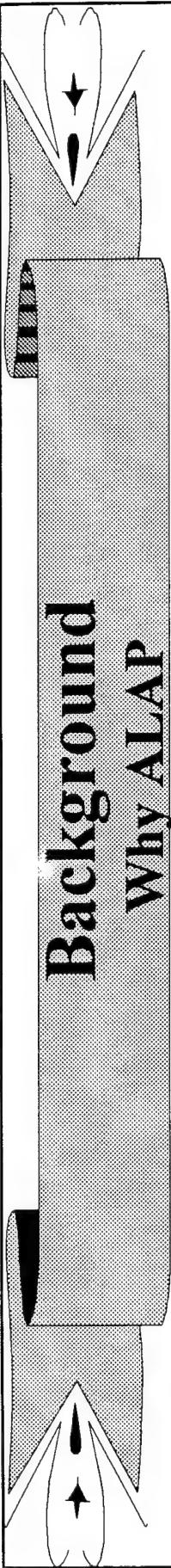
- Including USMC M1A1 & HMMWV

- Completed initial testing on all 16 Major SORTS systems and results briefed up to Army Vice Chief of Staff level

- Synergy and DALO-RMI negotiate two (2) work efforts:

- The first is to put FAMMAS in a Windows environment
- The second is to enhance FAMMAS and conduct Wartime Logistic assessments

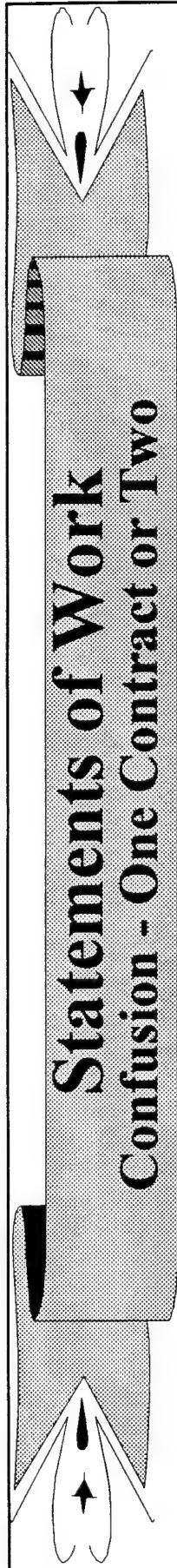




Background

Why ALAP

- Army Logistic Analysis Program (ALAP) reasonable follow on and complement to FAMMAS
- Assesses the sustainability of weapons systems in multiple MRC scenarios
- POM tool to graphically to asses sustainability given a budget position
- Provide total Peace-to-War Funding Scenario



FAMMAS -

Purpose

"...Development of an Army Readiness Model. The model will assess peacetime readiness..."

ALAP -

Purpose

"...Development of an Army Readiness Model. The model will assess peacetime readiness..."

Work To Be Accomplished

The contractor will design an Army FAMMAS model in a Windows environment. The model will be subject to a Preliminary Design Review (PDR) and a Critical Design Review (CDR). A Critical Design review will be held to finalize changes to the model.

Work To Be Accomplished

Perform wartime logistic assessments. The contractor will ...install a separate module within FAMMAS which enables the logistics community to assess the impact on system readiness caused by MODs, Depot Maintenance, and common support equipment (CSE)



Statements of Work

Confusion - One Contract or Two

FAMMAS -

Purpose

• Development of an Army Readiness Model. The model will assess peacetime readiness.

Purpose

• Development of an Army Readiness Model. The model will assess peacetime readiness.

ALAP -

Purpose

• Development of an Army Readiness Model. The model will assess peacetime readiness.

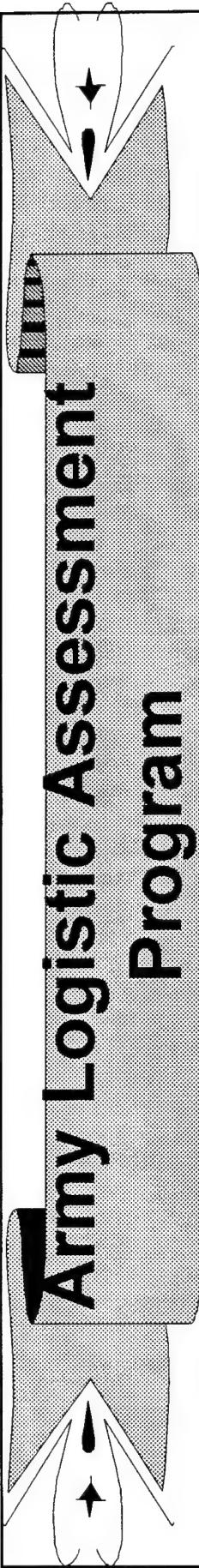
Deliverable

- Preliminary Design Review (PDR)
- Critical Design Review (CDR) Briefing
- Functional Description
- User's manual
- Software

Deliverable

- Technical Report
- Briefing of Tech Report
- Update Functional Description,
- Update User's Manual
- FAMMAS Enhancement Software

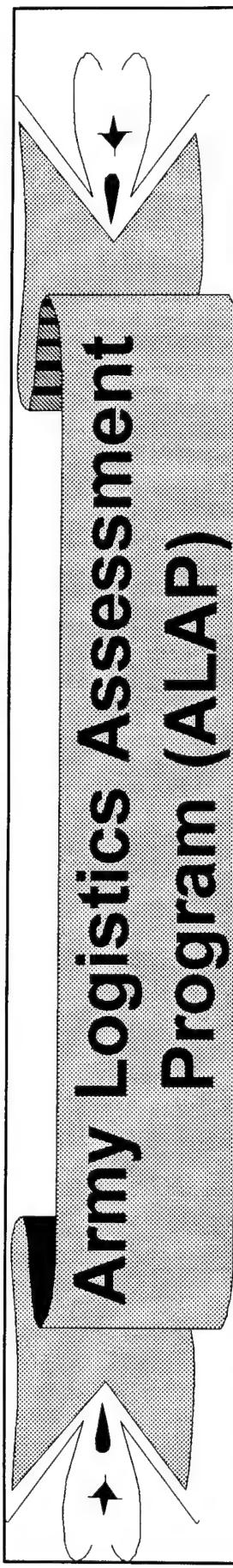




A Basic Description

- A Multi-Tasked Project
- Enhancements to FAMMAS
- Assess the Development of an Army Version WINLAM (Sustainment Model)
- WINLAM - A Decision Tool
- Macro-level Budget Analyses
- Quick assessments of programming and budgeting decision impact on Sustainment Capability

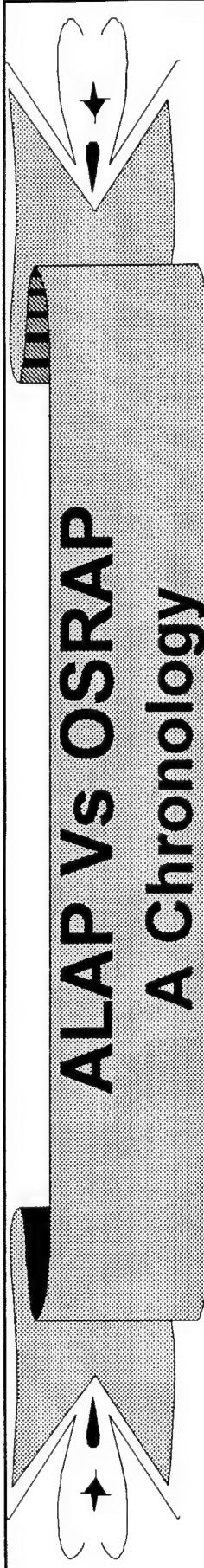




A Chronology of Events

- 16 Jan 95 - Contract dated
- Feb 95 - Work Begins
- Apr 95 - First Meeting with Principal Players At LOGSA
- ALAP Briefed as Wartime Version of FAMMAS
- AMSAA & AMC initial position - "No More Requirement Models" - OSRAP





ALAP Vs OSRAP A Chronology

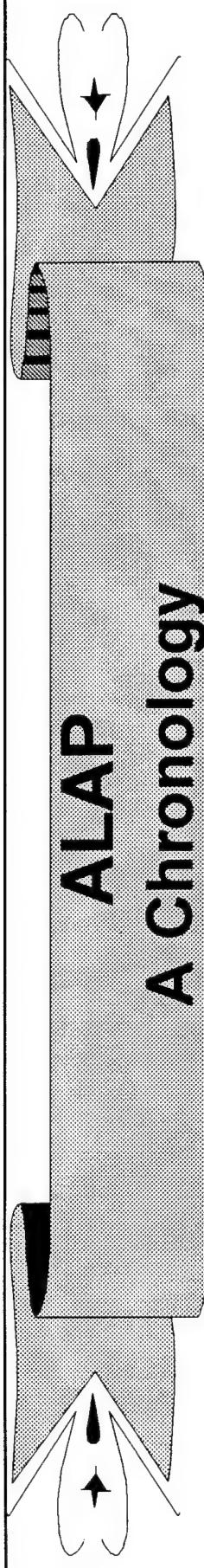
(Round 1)

- Apr - May 95 - Data Research for ALAP Model Development Stops

- May 95 - OSRAP Fact finding begins

- OSRAP - Stockage Requirement & Determination
- ALAP - Wartime Sustainment, MC Predictive & Budget Decision
- Similar Input Requirements



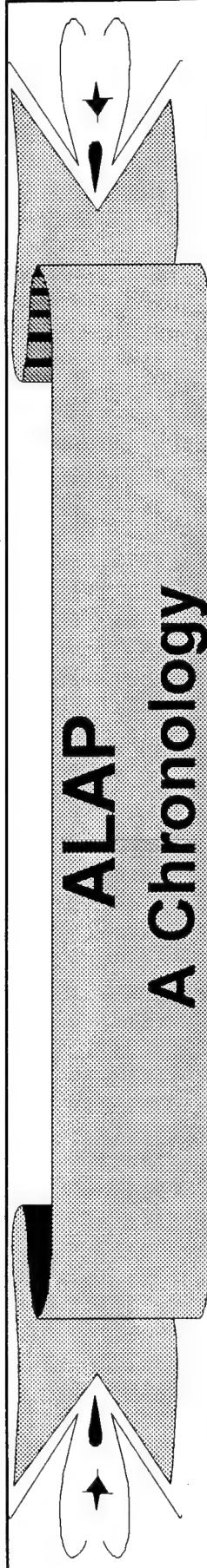


- Jun 95 - AMC assumes Project Oversight -

- Briefed Findings of OSRAP Investigations to AMC

- Model Development on hold until...

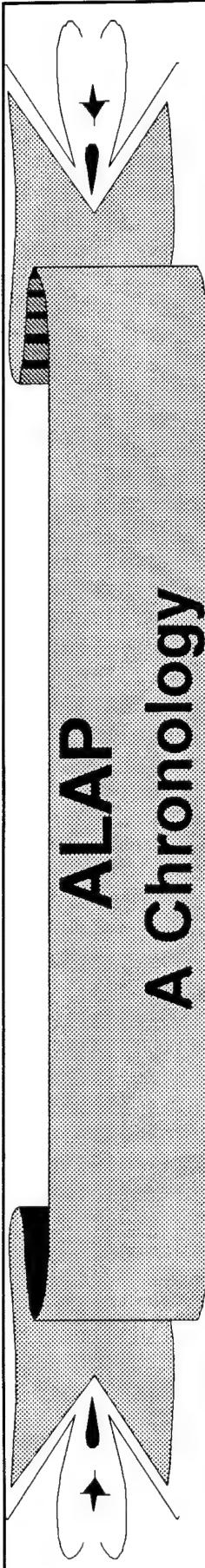
- Synergy Turns efforts to FAMMAS Enhancement
- Suggest other Tasks for ALAP Completion
 - Depot Maintenance Program
 - Integration of FAMMAS & OSRAP



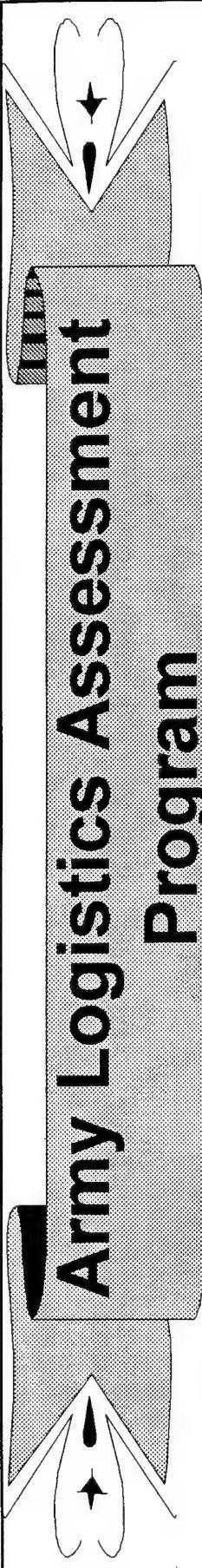
ALAP A Chronology

- Jul 95 - Investigation and development of Programmed Depot Maintenance Model favorable to AMC
- Aug 95 - DALO-RMI reserves right to make decision on Project Alterations (Depot Maint Model on hold)
 - Request OSRAP briefing and demo
 - ALAP Model Development continues on hold



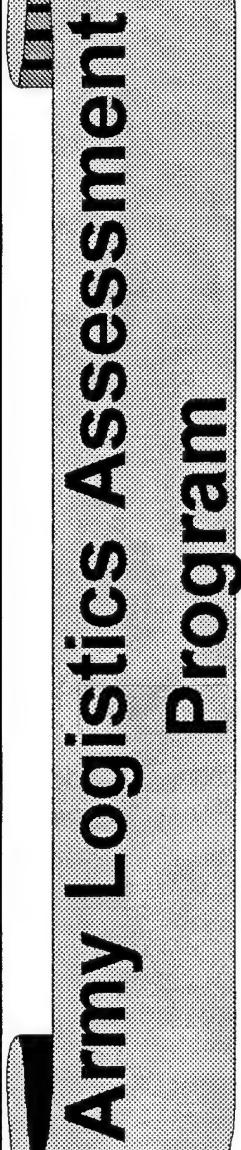


- Nov 95 - DALO-RMI gives "go-ahead" for completion of Proof-of-Concept Model
- Jan 96 - FAMMAS CDR/PDR
 - Personnel Changes within DALO-RMI
 - Reversal in thinking vis-a-vis Maintenance Module
 - ALAP Vs FAMMAS (Round 2 ?)



A Two Fold Objective

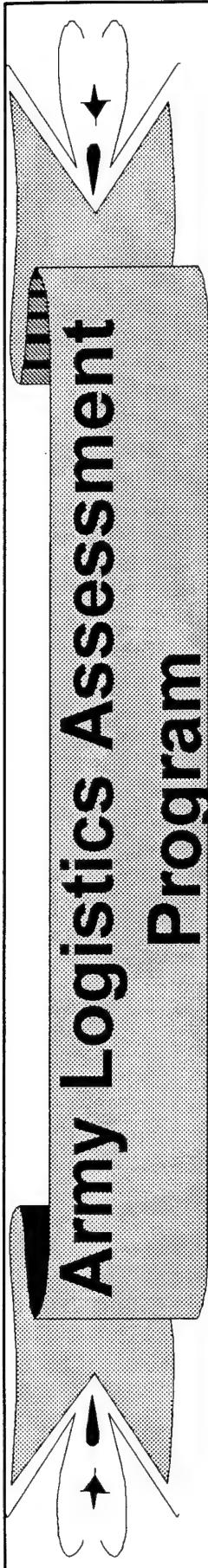
- Enhance FAMMAS by developing and installing
A Maintenance Module
- Investigate Possibility/Feasibility of producing
A Wartime/Sustainment POM and Budget Assessment
Decision Support Tool



Army Logistics Assessment Program

A Two Fold Approach

- **FAMMAS** Maintenance Module -
Identify key elements to NMCM reporting and
replicate using available data Sources
- Sustainment Proof of Concept Model-
 - Research Army Wartime Logistic System
 - Research weapon system sustainment efforts
 - Identify and develop data sources
 - Replicate Logistic Sustainment System



Status of Development

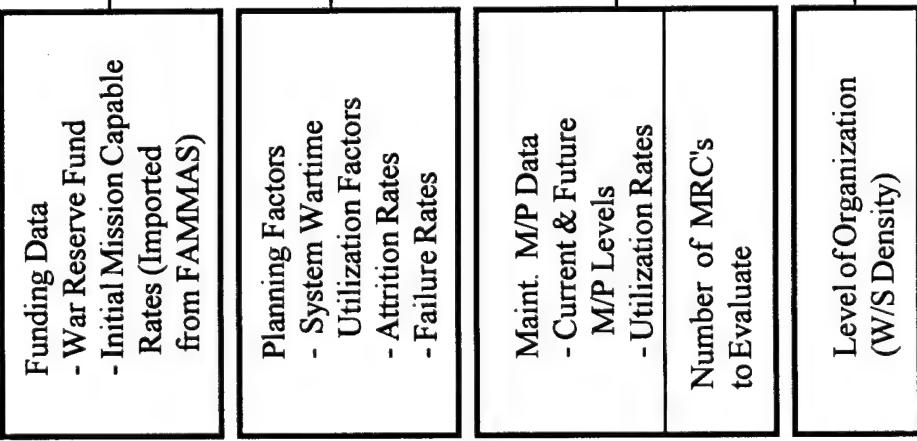
- **FAMMAS** Maintenance Module
 - Completed - Installed
 - Sustainment Model
- Models Architecture in Preliminary Development
 - Data Sources identified - 90% required data collected
 - Algorithms currently being developed



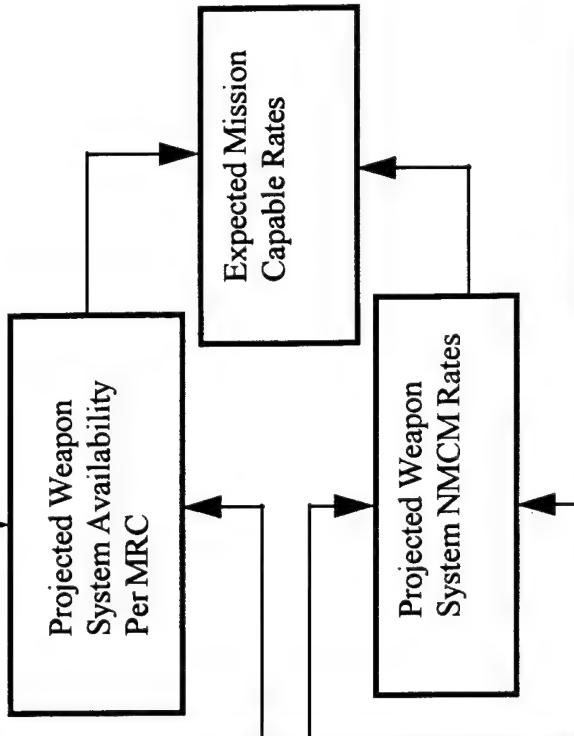
Army Logistics Assessment Program

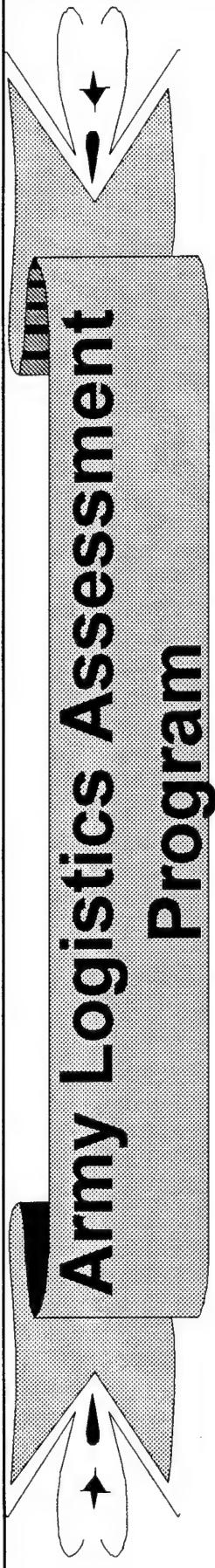
Preliminary Architecture/Logic Flow

INPUTS



OUTPUTS



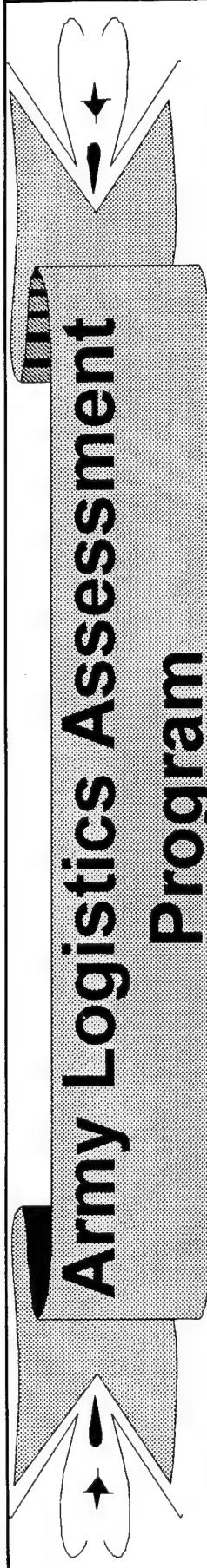


Army Logistics Assessment Program

DATA

DATA SOURCE	
Initial MC & NMC Rates	Army FAMMAS
Weapon System Density by Force Structure	TRAC-Lee/CASCOM Operations Logistics Planner
Combat OPTEMO	Concepts Analysis Agency
Current & Future Manpower Rates	Personnel Command MOSLS
Attrition Rates	LOGSA
Break Rates	Candidate Item File





SUMMARY

Initial Objective

Perform wartime logistic assessments.
The contractor will...install a separate module within FAMMAS which enables the logistics community to assess the impact on system readiness caused by MODs, Depot Maintenance, and common support equipment (CSE)

Revised Objective

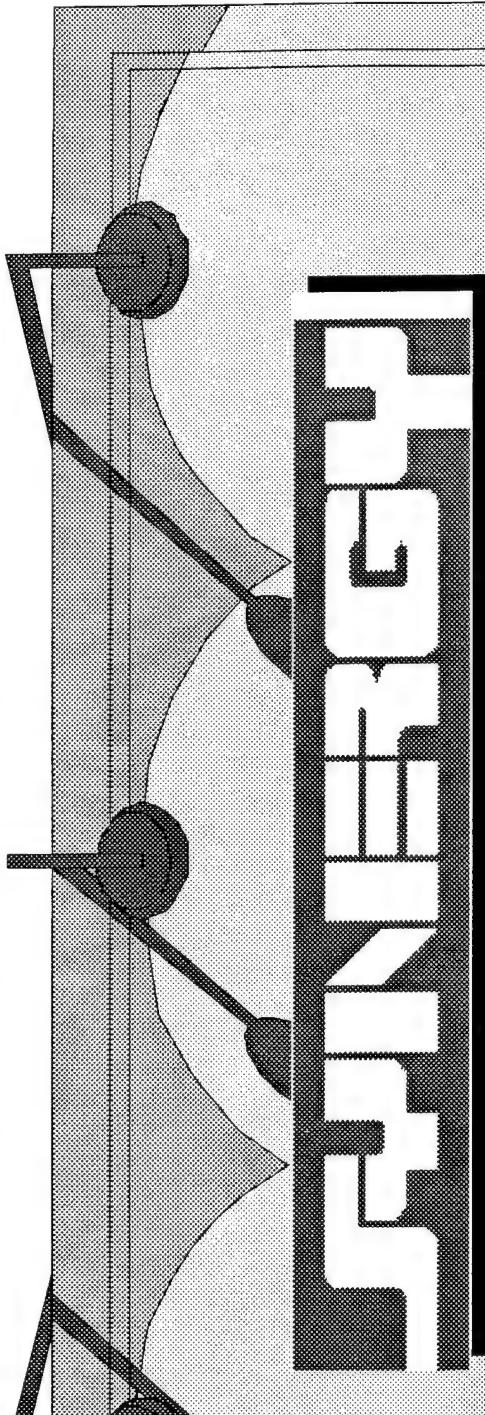
Because of the many start and stop delays, confusion among all involved regarding Project Coordinator, FAMMAS/ALAP confusion, project goals

Technical Report and Briefing
A Proof of Concept Model



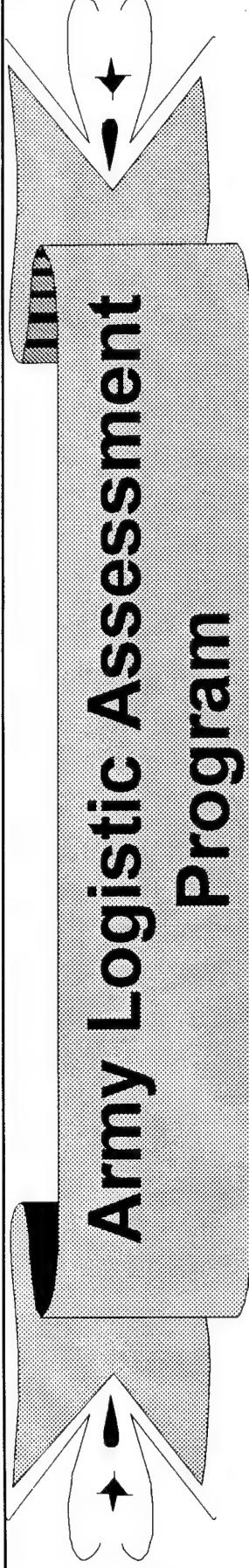
APPENDIX E

ARMY LOGISTICS ASSESSMENT PROGRAM TECHNICAL BRIEFING



**Army Logistic
Assessment Program
Technical Report
(Final Brief)**

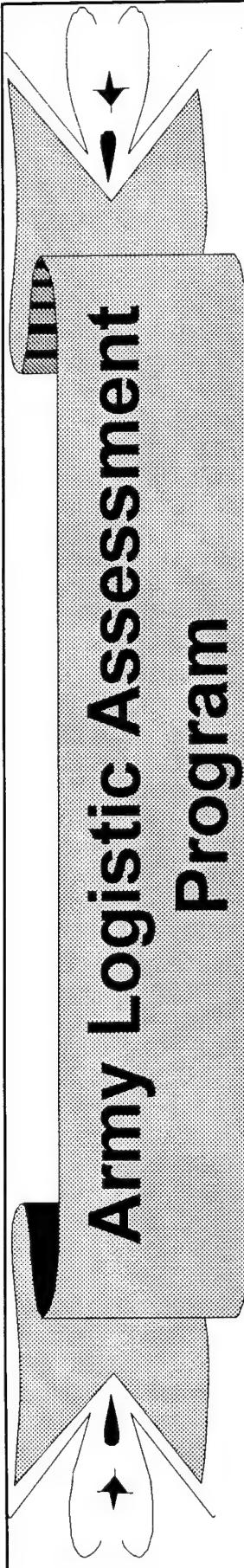
TECH



Army Logistic Assessment Program

Agenda

- Purpose
- Background/History
- ALAP - The Introduction
- The New Old Project Goal
- The Basic Statement - A Building Block
- Original Architecture
- Final Architecture
- The Proof of Concept Model (POCM)
- Improvements
- Summary



Army Logistic Assessment Program

Purpose

- To Provide Project Close-out Briefing
- To Report Project Analysis
- To Report POCM Prognosis
- To Explain/Demonstrate POCM

Army Logistic Assessment Program

Background

FALL 1993:

Do I Have to Listen to this again?



- GEN(R) Thurman, on Meyer Readiness Task Force, Impressed with USAF FAMMAS

DEC 1993:

- DCSLOG GEN. Salomon and DUSD (LOG), Mr. Klugh direct test on AH-64 Apache - Results were promising

Army Logistic Assessment Program



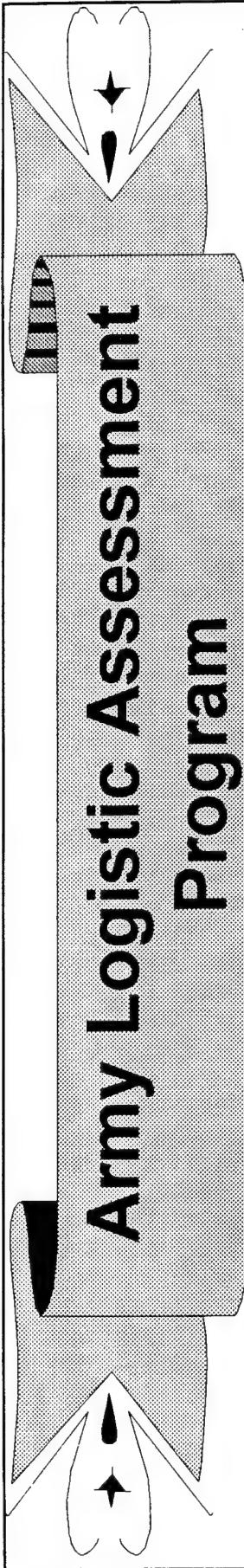
Background

FEB-MAR 1994:

- GEN Salomon directed testing on additional 3 Helicopter systems, Results Acceptable

APR 1994:

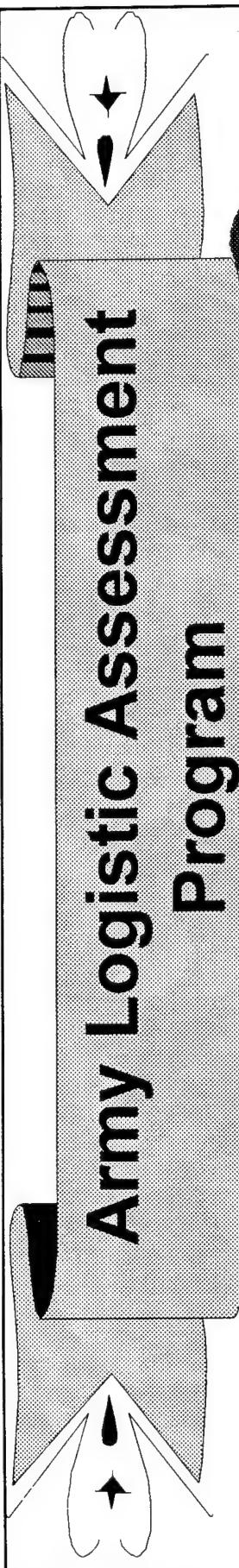
- DCSLOG GEN. Wilson directed test on M1A1 & Bradley Fighting Vehicle - FAMMAS successfully fitted to ground systems



Background

MAY 1994:

- GEN Wilson directed test on all 16 Major SORTS systems
- Synergy and DALO-RMI negotiate two (2) work efforts



Introduction To ALAP



ALAP

- Wrong Introductory Brief
- Situation Warranted Decision Brief
- Initial Mistake Haunts ALAP to Completion

Army Logistic Assessment Program

New Decision, Old Goal

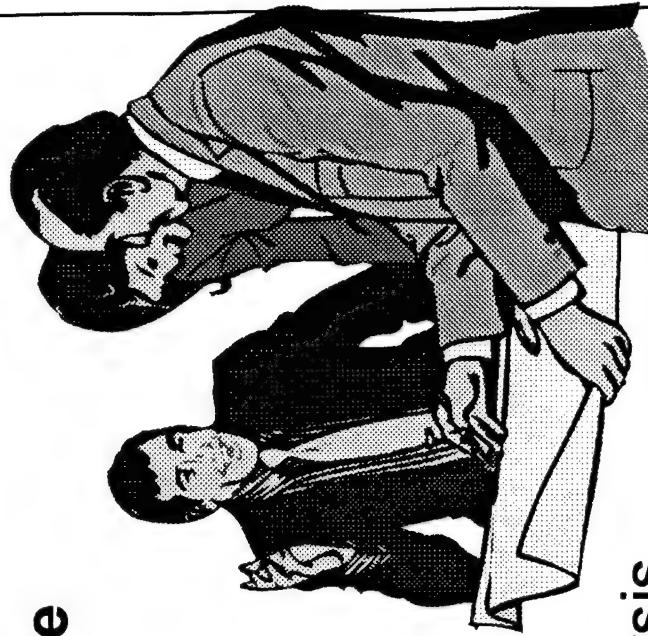
- Wartime Model - Sustainment Analysis
Based on Funding Levels &
Budget Posture
- Basic Statement - Model Foundation
 - Sustainment Linked to OPTEMPO
 - Link Army FAMMAS to Wartime
Model



STRATEGIC

Army Logistic Assessment Program

Original Architecture



- Model Combined Arms Sustainment Based on SRC Deployment
- Sustainment Capability Prediction Tied Base Year - Similar to Army FAMMAS
- Multiple OPTEMPO Sustainment Analysis
- MOSLS Data - Simulate Personnel & Equipment Attrition
- Resupply Simulation

CHALLENGE

ALAPTECHRPT - 9

Army Logistic Assessment Program

Final Architecture

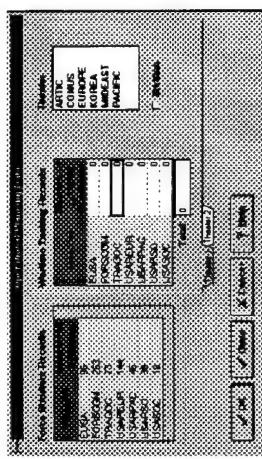
- Sustainment Analysis Based on Hours of Operation
- Single System Analysis
- 15 Day Scenario
- Randomized Attrition Rate
- Emphasis on Maintenance



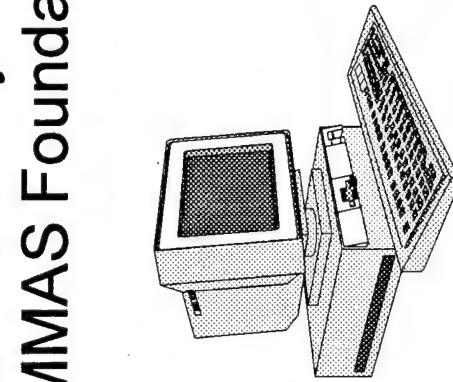
Army Logistic Assessment Program

Proof of Concept Model

- Built on Army FAMMAS Foundation



- Gives Weapon System Wartime Availability Based on Current Funding Levels



- Straight Forward Design Routine

| Days | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 | 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 | 180 | 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 | 196 | 197 | 198 | 199 | 200 | 201 | 202 | 203 | 204 | 205 | 206 | 207 | 208 | 209 | 210 | 211 | 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 | 221 | 222 | 223 | 224 | 225 | 226 | 227 | 228 | 229 | 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 | 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 251 | 252 | 253 | 254 | 255 | 256 | 257 | 258 | 259 | 260 | 261 | 262 | 263 | 264 | 265 | 266 | 267 | 268 | 269 | 270 | 271 | 272 | 273 | 274 | 275 | 276 | 277 | 278 | 279 | 280 | 281 | 282 | 283 | 284 | 285 | 286 | 287 | 288 | 289 | 290 | 291 | 292 | 293 | 294 | 295 | 296 | 297 | 298 | 299 | 300 | 301 | 302 | 303 | 304 | 305 | 306 | 307 | 308 | 309 | 310 | 311 | 312 | 313 | 314 | 315 | 316 | 317 | 318 | 319 | 320 | 321 | 322 | 323 | 324 | 325 | 326 | 327 | 328 | 329 | 330 | 331 | 332 | 333 | 334 | 335 | 336 | 337 | 338 | 339 | 340 | 341 | 342 | 343 | 344 | 345 | 346 | 347 | 348 | 349 | 350 | 351 | 352 | 353 | 354 | 355 | 356 | 357 | 358 | 359 | 360 | 361 | 362 | 363 | 364 | 365 | 366 | 367 | 368 | 369 | 370 | 371 | 372 | 373 | 374 | 375 | 376 | 377 | 378 | 379 | 380 | 381 | 382 | 383 | 384 | 385 | 386 | 387 | 388 | 389 | 390 | 391 | 392 | 393 | 394 | 395 | 396 | 397 | 398 | 399 | 400 | 401 | 402 | 403 | 404 | 405 | 406 | 407 | 408 | 409 | 410 | 411 | 412 | 413 | 414 | 415 | 416 | 417 | 418 | 419 | 420 | 421 | 422 | 423 | 424 | 425 | 426 | 427 | 428 | 429 | 430 | 431 | 432 | 433 | 434 | 435 | 436 | 437 | 438 | 439 | 440 | 441 | 442 | 443 | 444 | 445 | 446 | 447 | 448 | 449 | 450 | 451 | 452 | 453 | 454 | 455 | 456 | 457 | 458 | 459 | 460 | 461 | 462 | 463 | 464 | 465 | 466 | 467 | 468 | 469 | 470 | 471 | 472 | 473 | 474 | 475 | 476 | 477 | 478 | 479 | 480 | 481 | 482 | 483 | 484 | 485 | 486 | 487 | 488 | 489 | 490 | 491 | 492 | 493 | 494 | 495 | 496 | 497 | 498 | 499 | 500 | 501 | 502 | 503 | 504 | 505 | 506 | 507 | 508 | 509 | 510 | 511 | 512 | 513 | 514 | 515 | 516 | 517 | 518 | 519 | 520 | 521 | 522 | 523 | 524 | 525 | 526 | 527 | 528 | 529 | 530 | 531 | 532 | 533 | 534 | 535 | 536 | 537 | 538 | 539 | 540 | 541 | 542 | 543 | 544 | 545 | 546 | 547 | 548 | 549 | 550 | 551 | 552 | 553 | 554 | 555 | 556 | 557 | 558 | 559 | 560 | 561 | 562 | 563 | 564 | 565 | 566 | 567 | 568 | 569 | 570 | 571 | 572 | 573 | 574 | 575 | 576 | 577 | 578 | 579 | 580 | 581 | 582 | 583 | 584 | 585 | 586 | 587 | 588 | 589 | 590 | 591 | 592 | 593 | 594 | 595 | 596 | 597 | 598 | 599 | 600 | 601 | 602 | 603 | 604 | 605 | 606 | 607 | 608 | 609 | 610 | 611 | 612 | 613 | 614 | 615 | 616 | 617 | 618 | 619 | 620 | 621 | 622 | 623 | 624 | 625 | 626 | 627 | 628 | 629 | 630 | 631 | 632 | 633 | 634 | 635 | 636 | 637 | 638 | 639 | 640 | 641 | 642 | 643 | 644 | 645 | 646 | 647 | 648 | 649 | 650 | 651 | 652 | 653 | 654 | 655 | 656 | 657 | 658 | 659 | 660 | 661 | 662 | 663 | 664 | 665 | 666 | 667 | 668 | 669 | 670 | 671 | 672 | 673 | 674 | 675 | 676 | 677 | 678 | 679 | 680 | 681 | 682 | 683 | 684 | 685 | 686 | 687 | 688 | 689 | 690 | 691 | 692 | 693 | 694 | 695 | 696 | 697 | 698 | 699 | 700 | 701 | 702 | 703 | 704 | 705 | 706 | 707 | 708 | 709 | 710 | 711 | 712 | 713 | 714 | 715 | 716 | 717 | 718 | 719 | 720 | 721 | 722 | 723 | 724 | 725 | 726 | 727 | 728 | 729 | 730 | 731 | 732 | 733 | 734 | 735 | 736 | 737 | 738 | 739 | 740 | 741 | 742 | 743 | 744 | 745 | 746 | 747 | 748 | 749 | 750 | 751 | 752 | 753 | 754 | 755 | 756 | 757 | 758 | 759 | 760 | 761 | 762 | 763 | 764 | 765 | 766 | 767 | 768 | 769 | 770 | 771 | 772 | 773 | 774 | 775 | 776 | 777 | 778 | 779 | 780 | 781 | 782 | 783 | 784 | 785 | 786 | 787 | 788 | 789 | 790 | 791 | 792 | 793 | 794 | 795 | 796 | 797 | 798 | 799 | 800 | 801 | 802 | 803 | 804 | 805 | 806 | 807 | 808 | 809 | 810 | 811 | 812 | 813 | 814 | 815 | 816 | 817 | 818 | 819 | 820 | 821 | 822 | 823 | 824 | 825 | 826 | 827 | 828 | 829 | 830 | 831 | 832 | 833 | 834 | 835 | 836 | 837 | 838 | 839 | 840 | 841 | 842 | 843 | 844 | 845 | 846 | 847 | 848 | 849 | 850 | 851 | 852 | 853 | 854 | 855 | 856 | 857 | 858 | 859 | 860 | 861 | 862 | 863 | 864 | 865 | 866 | 867 | 868 | 869 | 870 | 871 | 872 | 873 | 874 | 875 | 876 | 877 | 878 | 879 | 880 | 881 | 882 | 883 | 884 | 885 | 886 | 887 | 888 | 889 | 890 | 891 | 892 | 893 | 894 | 895 | 896 | 897 | 898 | 899 | 900 | 901 | 902 | 903 | 904 | 905 | 906 | 907 | 908 | 909 | 910 | 911 | 912 | 913 | 914 | 915 | 916 | 917 | 918 | 919 | 920 | 921 | 922 | 923 | 924 | 925 | 926 | 927 | 928 | 929 | 930 | 931 | 932 | 933 | 934 | 935 | 936 | 937 | 938 | 939 | 940 | 941 | 942 | 943 | 944 | 945 | 946 | 947 | 948 | 949 | 950 | 951 | 952 | 953 | 954 | 955 | 956 | 957 | 958 | 959 | 960 | 961 | 962 | 963 | 964 | 965 | 966 | 967 | 968 | 969 | 970 | 971 | 972 | 973 | 974 | 975 | 976 | 977 | 978 | 979 | 980 | 981 | 982 | 983 | 984 | 985 | 986 | 987 | 988 | 989 | 990 | 991 | 992 | 993 | 994 | 995 | 996 | 997 | 998 | 999 | 1000 | 1001 | 1002 | 1003 | 1004 | 1005 | 1006 | 1007 | 1008 | 1009 | 10010 | 10011 | 10012 | 10013 | 10014 | 10015 | 10016 | 10017 | 10018 | 10019 | 10020 | 10021 | 10022 | 10023 | 10024 | 10025 | 10026 | 10027 | 10028 | 10029 | 10030 | 10031 | 10032 | 10033 | 10034 | 10035 | 10036 | 10037 | 10038 | 10039 | 10040 | 10041 | 10042 | 10043 | 10044 | 10045 | 10046 | 10047 | 10048 | 10049 | 10050 | 10051 | 10052 | 10053 | 10054 | 10055 | 10056 | 10057 | 10058 | 10059 | 10060 | 10061 | 10062 | 10063 | 10064 | 10065 | 10066 | 10067 | 10068 | 10069 | 10070 | 10071 | 10072 | 10073 | 10074 | 10075 | 10076 | 10077 | 10078 | 10079 | 10080 | 10081 | 10082 | 10083 | 10084 | 10085 | 10086 | 10087 | 10088 | 10089 | 10090 | 10091 | 10092 | 10093 | 10094 | 10095 | 10096 | 10097 | 10098 | 10099 | 100100 | 100101 | 100102 | 100103 | 100104 | 100105 | 100106 | 100107 | 100108 | 100109 | 100110 | 100111 | 100112 | 100113 | 100114 | 100115 | 100116 | 100117 | 100118 | 100119 | 100120 | 100121 | 100122 | 100123 | 100124 | 100125 | 100126 | 100127 | 100128 | 100129 | 100130 | 100131 | 100132 | 100133 | 100134 | 100135 | 100136 | 100137 | 100138 | 100139 | 100140 | 100141 | 100142 | 100143 | 100144 | 100145 | 100146 | 100147 | 100148 | 100149 | 100150 | 100151 | 100152 | 100153 | 100154 | 100155 | 100156 | 100157 | 100158 | 100159 | 100160 | 100161 | 100162 | 100163 | 100164 | 100165 | 100166 | 100167 | 100168 | 100169 | 100170 | 100171 | 100172 | 100173 | 100174 | 100175 | 100176 | 100177 | 100178 | 100179 | 100180 | 100181 | 100182 | 100183 | 100184 | 100185 | 100186 | 100187 | 100188 | 100189 | 100190 | 100191 | 100192 | 100193 | 100194 | 100195 | 100196 | 100197 | 100198 | 100199 | 100200 | 100201 | 100202 | 100203 | 100204 | 100205 | 100206 | 100207 | 100208 | 100209 | 100210 | 100211 | 100212 | 100213 | 100214 | 100215 | 100216 | 100217 | 100218 | 100219 | 100220 | 100221 | 100222 | 100223 | 100224 | 100225 | 100226 | 100227 | 100228 | 100229 | 100230 | 100231 | 100232 | 100233 | 100234 | 100235 | 100236 | 100237 | 100238 | 100239 | 100240 | 100241 | 100242 | 100243 | 100244 | 100245 | 100246 | 100247 | 100248 | 100249 | 100250 | 100251 | 100252 | 100253 | 100254 | 100255 | 100256 | 100257 | 100258 | 100259 | 100260 | 100261 | 100262 | 100263 | 100264 | 100265 | 100266 | 100267 | 100268 | 100269 | 100270 | 100271 | 100272 | 100273 | 100274 | 100275 | 100276 | 100277 | 100278 | 100279 | 100280 | 100281 | 100282 | 100283 | 100284 | 100285 | 100286 | 100287 | 100288 | 100289 | 100290 | 100291 | 100292 | 100293 | 100294 | 100295 | 100296 |<
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Army Logistic Assessment Program

Proof of Concept Model

Operational Planning Data

Theater

ARTIC	
CONUS	
EUROPE	
KOREA	
MIDEAST	
PACIFIC	

Wartime Tasking Records

MAJOR COMMAND	NUMBER OF SYSTEMS
EUSA	0
FORSCOM	0
TRADOC	73
USAREUR	144
USARPAC	0
USARSO	0
USASOC	0

Total: 217

Theater 1 / Theater 2

OK ✕ Cancel ? Help

Army Logistic Assessment Program

Proof of Concept Model

		Wartime Outputs				
Total Deployed Systems	Days	1	2	3	4	5
Systems Mission Capable	217	208	200	193	186	180
Systems Waiting Parts	0	0	0	0	0	0
Systems Waiting Maintenance	9	8	7	7	6	5
Repaired Systems	12	12	12	12	12	12

Minimum MC 0.96

OK

EUROPE / PACIFIC

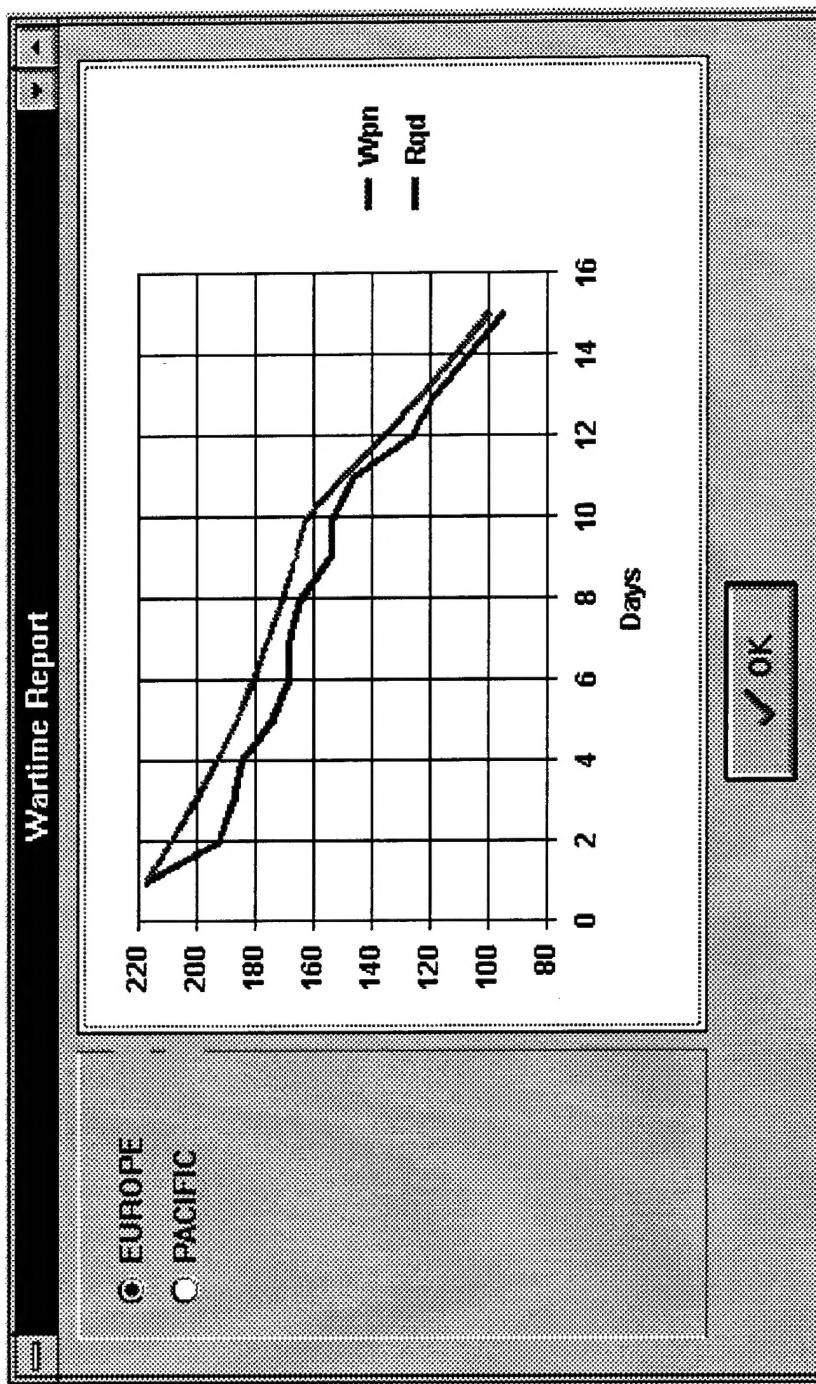
Army Logistic Assessment Program

Proof of Concept Model

Year	Actual/Projected		Wartime Report	
	Number	Value	Number	Value
1991	0.11357	0.20491	0.68152	<input checked="" type="checkbox"/> OK
1992	0.0961	0.2486	0.6553	
1993	0.072	0.282	0.646	
1994	0.0874	0.2362	0.6764	
1995	0.0772	0.2429	0.6799	
1996	0.09463	0.1	0.80537	
1997	0.09463	0.1	0.80537	
1998	0.09463	0.1	0.80537	
1999	0.06663	0.08	0.85137	
2000	0.08076	0.08	0.83924	
2001	0.11181	0.08	0.80819	

Army Logistic Assessment Program

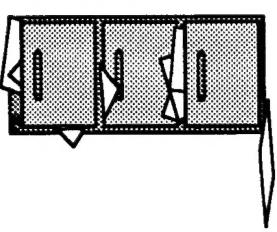
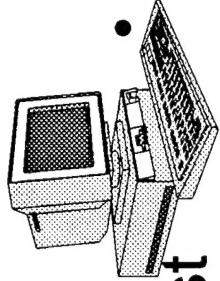
Proof of Concept Model



Army Logistic Assessment Program

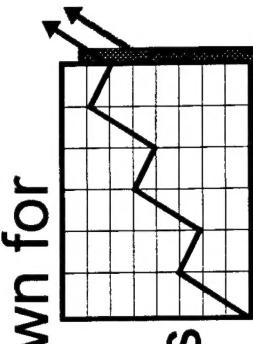
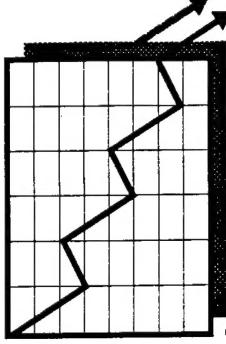
POCM Data Input & Report Output

Input



- Mission Profile Development List (TRADOC)-OPLGPLN
- Candidate Item File (LOGSA)
- Theater Wartime OPTEMPO
- CAA) - OPLGPLN

Output



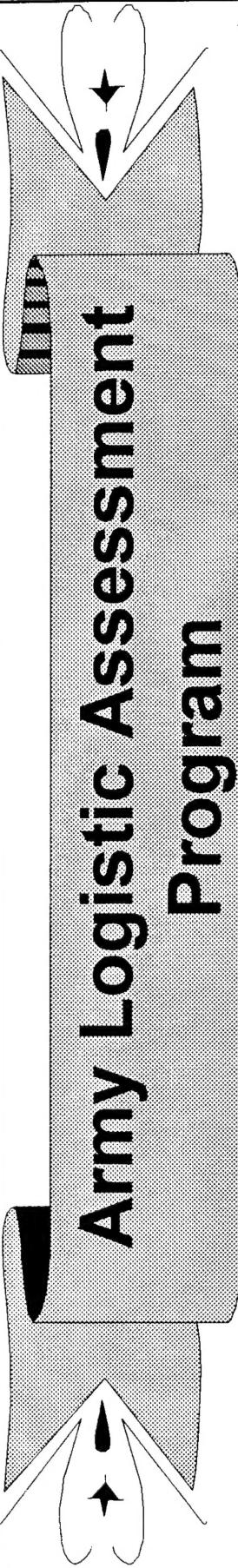
- Systems MC
- Systems Down for Maintenance
- Systems Down for Supply
- # of Systems Brought Up Within 24 Hr Period
- Min Wartime MC Rate

Army Logistic Assessment Program

Improvements/Work To Be Done

- Build Combined Arms Analysis Capability
- Add Multiple OPTEMPO Analysis
- Add Resupply Routine
- Add MOSLS Data
- Redesign (with User Input) Analysis Screen
- Integrate With OSRP





Army Logistic Assessment Program Summary



- Concept Proved Viable
- Functionality Sacrificed Because of False Start
- Much Room For Improvement
- Expensive Lesson Learned

LOGISTICS